

SH2004-DC90A

●Applications

General purpose compact printers

- 1) ROHM new technology "STEP FREE" structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 2) Inclined toward the printing surface to provide excellent printing quality even for cards and thick paper.
- 3) Prints directly on printing medium that cannot be bent.
- 4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic Damage.
- 5) Being low-profile when installed enables smaller printers.
- 6) Compatible with the SH3004-DC90A (300dpi) in mechanical specifications, to facilitate the making of a series of printers.

Technical drawings of the JST B6PS-VH connector, showing dimensions and component labels.

Top View:

- Overall width: 124 ± 0.5
- Effective print width: 112 (EFFECTIVE PRINT WIDTH)
- Maximum height: 5.1 (Max. 5.1)
- Labels: DOT #896, DOT #1

Side View:

- Maximum height: 5.1 (Max. 5.1)
- Maximum width: 12 (Max. 12)
- Label: Paper feed direction

Top View (Pin Layout):

- Labels: #1, #6, #20, #2, #19, #1
- Components: HIROSE HIF3FC-20PA-2.54DS, JST B6PS-VH

Bottom View (Detailed Dimensions):

- Pin diameter: $\phi 3H10$
- Effective depth: 3 (EFFECTIVE DEPTH 3)
- Pin length: 4 (EFFECTIVE DEPTH 3)
- Dimensions: 100 ± 0.2 , 10 ± 0.2 , 16 ± 0.2 , 40 ± 0.3 , 80 ± 0.3 , 17.8 ± 0.2 , 7.3 ± 0.3 , 2.8 ± 0.2 , 21.3 , 25 ± 0.5
- Labels: DOT #1, 3-M3, (22)

ROHMO

Printheads

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	112	mm
Dot pitch	–	0.125	mm
Total dot number	–	896	dots
Average resistance value	Rave	550	Ω
Applied voltage	V _H	24	V
Applied power	P _O	0.91	W / dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously	–	896	dots
Maximum clock frequency	–	10	MHz
Maximum roller diameter	–	–	mm
Running life / pulse life	–	50 / 10 ⁸	km / pulses
Operating temperature	–	5 to 45	°C

●Pin configuration

HIROSE

No.	Circuit	No.	Circuit
1	V _{DD}	2	BEO
3	GND	4	DI2
5	N.C.	6	CLK
7	LA	8	GND
9	GND	10	DI1
11	N.C.	12	GND
13	V _{DD}	14	STB2
15	STB1	16	TM
17	TM	18	SENS1
19	SENS2	20	SENS3

JST

No.	Circuit
1	VH
2	VH
3	VH
4	GND
5	GND
6	GND

Printheads

●Timing chart

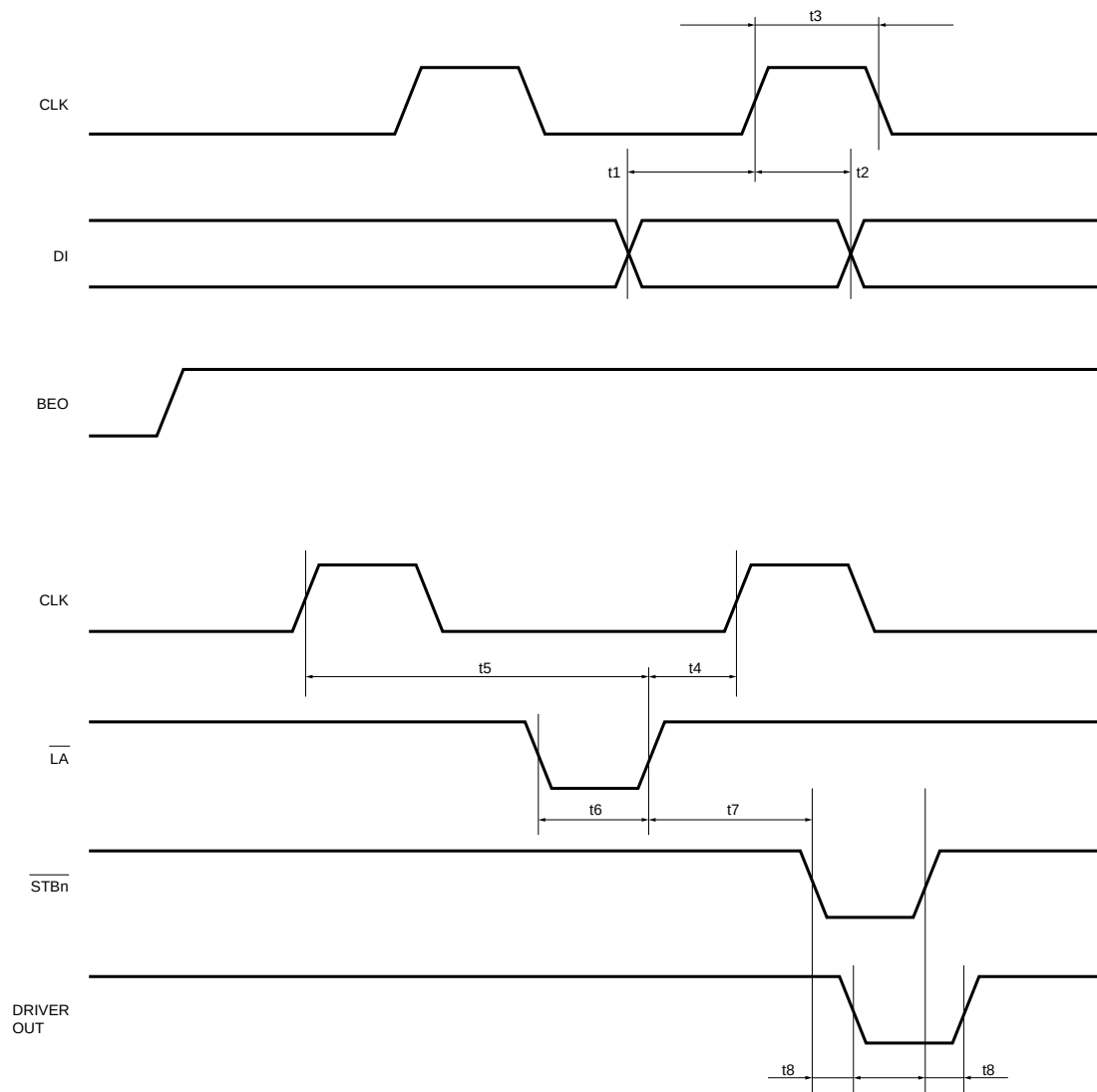
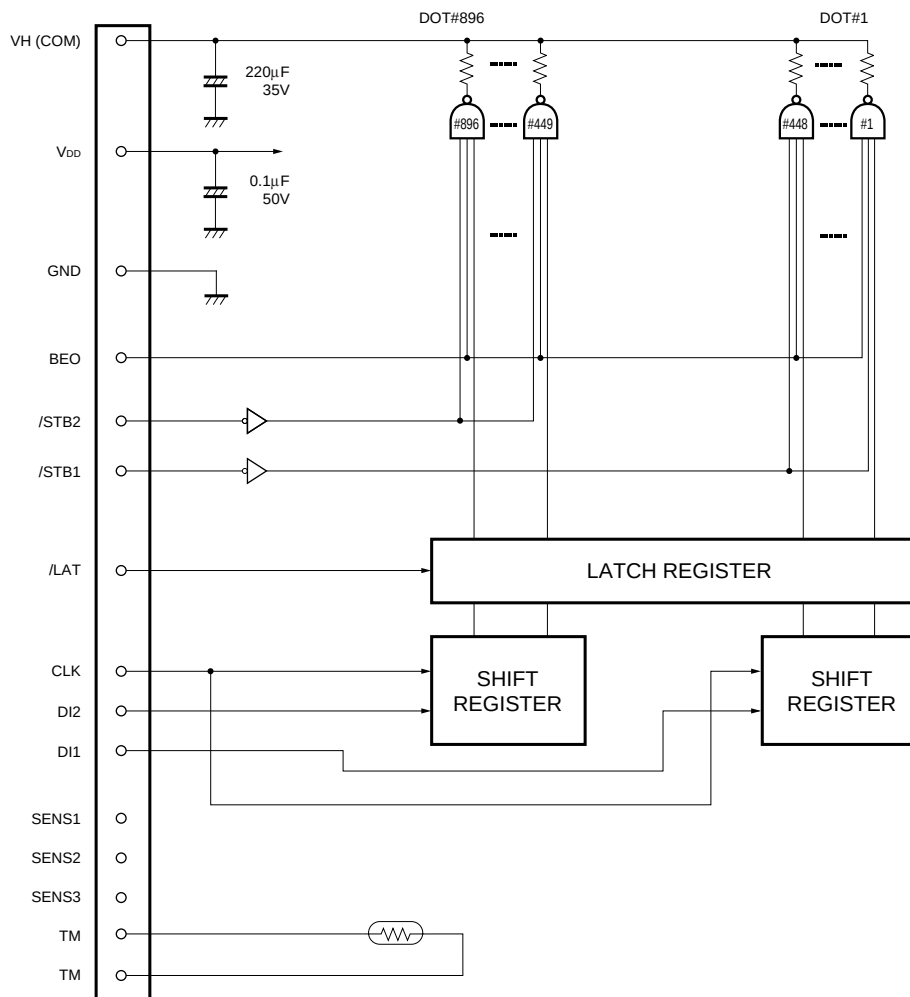


Fig.1

Printheads

●Equivalent circuit



DI No.	DOT No.	STB No.	DOT No.
DI2	896 to 449	STB 2	896 to 449
DI1	448 to 1	STB 1	448 to 1

Fig. 2

Printheads

●Electrical characteristics curves

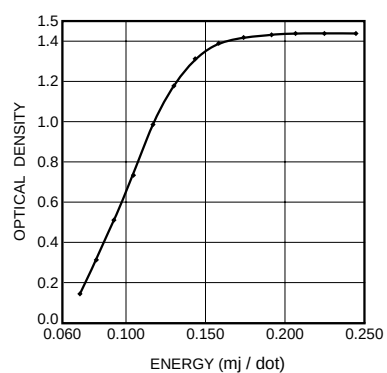


Fig. 3 Representative density curve

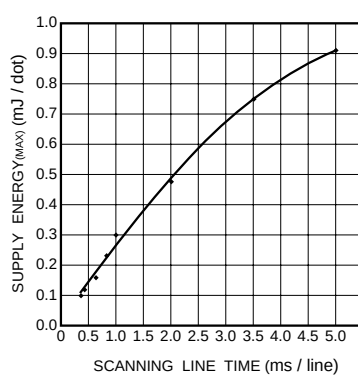


Fig. 4 Maximum energy curve

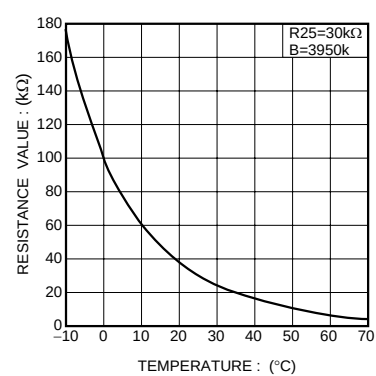


Fig. 5 Thermistor curve

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